REMARKS

Claims 1-11 and 14-24 are pending in this application. By this Amendment, the specification is amended. In addition, claims 1-8, 14, 15, 17 and 21-24 are amended and claims 12 and 13 are canceled. Reconsideration in view of the above amendments and the following remarks are respectfully requested.

I. ALLOWABLE SUBJECT MATTER

Applicants gratefully acknowledge the Examiner's indication of allowable subject matter in claims 10 and 11. However, Applicants respectfully submit that all of claims 1-11 and 14-24 are allowable, for at least the reasons set forth below.

II. THE OBJECTIONS TO THE DRAWINGS AND SPECIFICATION ARE OBVIATED

The Office Action objects: (1) to the drawings under 37 CFR 1.83(a); (2) to the disclosure because the same reference number refers to two different elements; and (3) the specification for failing to provide proper antecedent basis for the claimed subject matter. These objections are respectfully traversed.

Applicants respectfully submit that Fig. 5 and Embodiment 4 discloses "...switching element is connected to a capacitance," as set forth in claim 5. With respect to claim 20, Fig. 10 and the explanation, page 17, last paragraph to page 18, discloses "...reflection area of said reflection layer is greater than an electrode area said pixel electrode". In addition, the amendment to the specification obviates the objection pertaining to the same reference number for two different elements.

Accordingly, withdrawal of the objection to the drawings and disclosure is respectfully solicited.

III. THE CLAIMS SATISFY THE REQUIREMENTS OF 35 U.S.C. §112, 1st PARAGRAPH

The Office Action rejects claims 5-7 under 35 U.S.C. §112, first paragraph. This rejection is respectfully traversed.

As noted above, Applicants respectfully submit that the specification provides proper disclosure for the switching element being connected to a capacitance on at least page 17, last paragraph, to page 18. Accordingly, withdrawal of the rejection of claims 5-7 under 35 U.S.C. §112, first paragraph is respectfully solicited.

IV. THE CLAIMS DEFINE PATENTABLE SUBJECT MATTER

The Office Action rejects: **(1)** claims 1-4 and 12-23 under 35 U.S.C. §102(b) as anticipated by JP 07-230101 to Masaya et al.; **(2)** claims 1-4 and 12-15 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,185,894 to Hilton et al.; **(3)** claims 12 and 13 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,650,825 to Matic; **(4)** claims 12 and 13 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,049,364 to Takahara et al.; and **(5)** claim 24 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,108,056 to Nakajima et al. These rejections are respectfully traversed.

Applicants respectfully submit that the rejection to claims 12 and 13 is moot in light of the cancellation of these claims. In addition, Applicants respectfully submit that the cited references fail to teach or suggest each and every feature as set forth in the claimed invention. In particular, the cited references fail to teach or suggest a thickness of the pixel electrode, as set forth in the claimed invention. In addition, none of the cited references teach or suggest both a dielectric multi-layer film and a reflection layer comprising a metal material, as set forth in the claimed invention.

For example, the thickness of the pixel electrode is important in order to effectively improve the reflectivity as described on at least page 15, line 6, and page 19, beginning at line 6. Furthermore, the materials, such as aluminum, silver, rhodium, nickel, and alloy, and the area of the reflection layer are not disclosed in the cited references. In contrast, these elements are recited in the claimed invention. As such, Applicants respectfully submit that it is clear that the reflection layer of the present invention functions far differently from the metal layers in the cited references.

Furthermore, none of the cited references teaches both a dielectric multi-layer film and a reflection layer comprising a metal material, as set forth in the claimed invention. Applicants respectfully submit that it is really important to provide both of them in order to effectively improve the reflective capabilities.

According to MPEP §2131, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claims." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913 (Fed. Cir. 1989). The elements must be arranged as required by the claims, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Office Action has failed to establish the required *prima facie* case of anticipation because all of the cited references fail to teach or suggest each and every feature as set forth in the claimed invention.

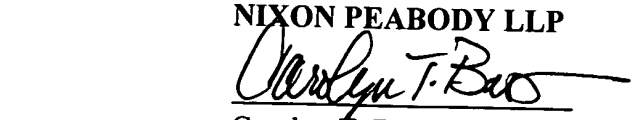
Applicants respectfully submit that claims 1-11 and 14-24 are allowable, for at least the reasons set forth above, over the cited references. Accordingly, withdrawal of the rejection of claims 1-9 and 12-24 under 35 U.S.C. §102(b) is respectfully solicited.

V. CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,
NIXON PEABODY LLP



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A gate insulating film is denoted by reference numeral 807; gate electrodes by 808 and 809; a first interlayer insulating film by 810; source electrodes by 811 and 812; drain electrodes by 813 and 814. The top thereof is flattened by a second interlayer insulating film 815 to form on the flattened surface a dielectric multi-layer film 818 [812] (dielectric films 819 with a low refractive index and dielectric films 820 with a high refractive index) of the present invention and to form pixel electrodes 816 and 817. Then an orientated layer 821 is formed.

1. (Amended) A liquid crystal display device comprising:

a switching element formed on a substrate;

a pixel electrode formed of a transparent conductive film, said electrode being connected to said switching element; and

a reflection layer formed of a dielectric multilayer film, which is arranged in contact with said pixel electrode,

wherein said pixel electrode has a thickness of 50.5 nm to 88.4 nm. N/4

2. (Amended) A device according to claim 1, wherein a liquid crystal is sealed between a pair of substrates, said liquid crystal display device comprising said pixel electrode arranged in a matrix manner [on] over one substrate, a thin film transistor connected to said pixel electrode, and a reflection layer.

3. (Amended) A liquid crystal display device comprising a switching element formed on a substrate, a pixel electrode connected to said switching element, and a reflection layer,

wherein said pixel electrode is formed of a transparent conductive film, [and]

wherein said reflection layer formed of a dielectric multilayer film is provided under said pixel electrode, and

wherein said pixel electrode has a thickness of 50.5 nm to 88.4 nm. N/4

5/20/2021

4. (Amended) A device according to claim 3, wherein a liquid crystal is sealed between a pair of substrates, said liquid crystal display device [comprising] comprises said pixel electrode arranged in a matrix manner [on] over one of said pair of [substrate] substrates, a thin film transistor connected to said pixel electrode, and a reflection layer.

5. (Amended) A liquid crystal display device comprising a switching element formed on a substrate, a pixel electrode connected to said switching element, and a reflection layer,

wherein said switching element is connected to a capacitance,

[the] wherein said capacitance comprising a common electrode formed of a transparent conductive film, a dielectric film formed on said common electrode, and said pixel electrode formed of a transparent conductive film formed on said dielectric film, and

wherein said reflection layer formed of a dielectric multilayer film is provided below said common electrode.

N/4

6. (Amended) A device according to claim 5,

wherein said dielectric film [is made of] comprises a dielectric material having a low refractive index, and

wherein said common electrode and said pixel electrode [are] both [made of] comprises a conductive material having a high refractive index.

7. (Amended) A device according to claim 5, wherein a liquid crystal is sealed between a pair of substrates, said liquid crystal display device [comprising] comprises said pixel electrode arranged in a matrix manner [on] over one of said pair of [substrate] substrates, a thin film transistor connected to said pixel electrode, and a reflection layer.

8. (Amended) A method of manufacturing a liquid crystal display device, comprising the steps of:

forming a switching element on a substrate;

forming a reflection layer formed of a dielectric multilayer film above said switching element; and

forming a pixel electrode formed of a transparent conductive film on said reflection layer,

wherein said pixel electrode has a thickness of 50.5 nm to 68.4 nm. N/4

14. (Amended) A liquid crystal display device, comprising:

a switching element formed on a substrate;

a pixel electrode formed of a transparent conductive film, said electrode being connected to said switching element;

a dielectric film below said pixel electrode; and

a reflection layer [made of] comprising a metal material below said dielectric film,

wherein said metal element is aluminum, silver, rhodium, nickel or alloy, and

wherein a reflection area of said reflection layer is greater than an electrode area of said pixel electrode.

15. (Amended) A device according to claim 14,

wherein said pixel electrode [is made of] comprises a conductive material having a high refractive index, and

wherein said dielectric film [is made of] comprises a dielectric material having a low refractive index.

17. (Amended) A liquid crystal display device, comprising:

a switching element formed on a substrate;

a pixel electrode formed of a transparent conductive film, said electrode being connected to said switching element;

a dielectric multilayer film below said pixel electrode; and

a reflection layer [made of] comprising a metal material below said dielectric multilayer film.

21. (Amended) A device according to claim 17, wherein a liquid crystal is sealed between a pair of substrates, said liquid crystal display device [comprising] comprises said pixel

electrode arranged in a matrix [on] over one of said pair of [substrate] substrates and a thin film transistor connected to said pixel electrode[, and a reflection layer].

22. (Amended) A method of manufacturing a liquid crystal display device, comprising the steps of:

forming a switching element on a substrate;

forming a reflection layer [formed of] comprising a metal material above said switching element;

forming a dielectric film on said reflection layer; and

forming a pixel electrode formed of a transparent conductive film on said dielectric film,

wherein said metal element is aluminum, silver, rhodium, nickel or alloy, and

wherein a reflection area of said reflection layer is greater than an electrode area of said pixel electrode.

23. (Amended) A method of manufacturing a liquid crystal display device, comprising the steps of:

forming a switching element on a substrate;

forming a reflection layer [formed of] comprising a metal material above said switching element;

forming a dielectric multilayer film on said reflection layer; and

forming a pixel electrode formed of a transparent conductive film on said dielectric multilayer film.

24. (Amended) A method of manufacturing a liquid crystal display device, comprising the steps of:

forming a switching element on a substrate;

forming an interlayer insulating film over said switching element;

forming a reflection layer [made of] comprising a metal material on said interlayer insulating film;

forming a dielectric film on said reflection layer; and

forming a pixel electrode formed of a transparent conductive film on said dielectric film to form an auxiliary capacitance comprised of said pixel electrode, said dielectric film, and said reflection layer,

wherein said metal element is aluminum, silver, rhodium, nickel or alloy, and

wherein a reflection area of said reflection layer is greater than an electrode area of said pixel electrode.